

DETAILED ACTION

Acknowledgement is made of the amendment filed 8/05/2011, amending claims 1, 14 and 21 and canceling claims 6, 8-13, 16-20 and 22. Accordingly, claims 1-5, 7, 14, 21 and 23-34 are currently pending and presented for examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-5, 7, 14, 21 and 23-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Welt et al. (US 5,984,935)** in view of **Teed et al. (US 2005/0197665 A1)** in view of **Kamemizu (US 6,652,550 B1)** in view of **Fox et al. (US 6,502,272 B1)**.

Regarding claim 1, Welt discloses a non-shaving head (4) which in use is capable of being moved over the skin to effect removal of the composition; a handle (6)

having a broadened end distal from the non-shaving head (fig. 7); and a joint between the head and the handle, permitting an articulation of the head about the handle, the joint being defined by an opening oriented upward when used to effect the removal of the composition (fig. 7; column 3, lines 47-53); wherein both the non-shaving head and the handle have a downward concave curvature profile when used to effect the removal of the composition, the downward concave curvature profile of the handle extending along a majority of the length of the handle (fig. 7). Welt discloses wherein the joint is formed by a web of plastic material at the base of an upwardly open V-shaped notch between the handle and the head (fig. 7; column 2, lines 40-44).

Welt fails to disclose wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle; wherein the handle is substantially waisted in shape; and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle.

However, Teed teaches a non-shaving head wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle (figs. 1, 2; [0030]; wherein the handle begins proximal to strap 23); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (fig. 3).

Given the teachings of Teed, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt with the continuous concave handle of Teed and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle. Doing so provides a comfortable fit

in the palm of the user's hand, as disclosed by Teed ([0030]) as well as providing a head with a greater surface area, allowing the user to use less strokes to cover a greater treatment area.

Teed fails to disclose wherein the handle is substantially waisted in shape.

However, Kamemizu teaches a non-shaving head (7) which in use is capable of being moved over the skin to effect removal of the composition; a handle (2) having a broadened end distal from the non-shaving head (figs. 1A-1C) wherein the handle is substantially waisted in shape (figs. 1A-1C); and a joint (elastic portion 5) between the head and the handle, permitting an articulation of the head about the handle; wherein both the non-shaving head and the handle have a downward concave curvature profile when used to effect the removal of the composition (figs. 1C, 2A), the downward concave curvature profile of the handle extending along a majority of the length of the handle (fig. 1C); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (figs. 1A, 1B).

Given the teachings of Kamemizu, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed wherein the handle is substantially waisted in shape. Doing so provides a comfortable fit in the palm of the user's hand.

Welt in view of Teed in view of Kamemizu teach that tongue cleaning instruments such as brush-type instruments and combined toothbrush and tongue scrapes are well known (Welt, column 1, lines 12-18), but fail to disclose wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa.

However, Fox teaches a toothbrush with a handle and head section made of a plastic with a Flexural Modulus of 216,000 psi or 1.49 GPa, such that the material will provide enhanced rigidity to allow the user to better control and manipulate the position of the toothbrush head during use (column 4, lines 15-19, 28-30).

Given the teachings of Welt and Fox, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed in view of Kamemizu wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa. Doing so would provide enhanced rigidity to allow the user to better control and manipulate the position of the device during use, as taught by Fox.

Regarding claim 14, Welt discloses a non-shaving head (4), the head comprising a planar surface (the blade 10) comprising a flat top surface and a flat under surface, the planar surface ending in a single straight edge (column 3, lines 7-11); a handle (6) having a broadened end distal from the head (fig. 7); and a single joint between the handle and the head having an upward opening that limits articulation of the head with respect to the handle during use in removing compositions (column 3, lines 47-53); wherein both the non-shaving head and the handle have a concave curvature profile relative to the tissue during use, the concave curvature profile of the handle extending along a majority of the length of the handle (fig. 7). Welt discloses wherein the joint is formed by a web of plastic material at the base of an upwardly open V-shaped notch between the handle and the head (fig. 7; column 2, lines 40-44).

Welt fails to disclose wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle; wherein the handle is substantially waisted in shape; and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle.

However, Teed teaches a non-shaving head wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle (figs. 1, 2; [0030]; wherein the handle begins proximal to strap 23); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (fig. 3).

Given the teachings of Teed, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt with the continuous concave handle of Teed and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle. Doing so provides a comfortable fit in the palm of the user's hand, as disclosed by Teed ([0030]) as well as providing a head with a greater surface area, allowing the user to use less strokes to cover a greater treatment area.

Teed fails to disclose wherein the handle is substantially waisted in shape.

However, Kamemizu teaches a non-shaving head (7) which in use is capable of being moved over the skin to effect removal of the composition; a handle (2) having a broadened end distal from the non-shaving head (figs. 1A-1C) wherein the handle is substantially waisted in shape (figs. 1A-1C); and a joint (elastic portion 5) between the head and the handle, permitting an articulation of the head about the handle; wherein

both the non-shaving head and the handle have a downward concave curvature profile when used to effect the removal of the composition (figs. 1C, 2A), the downward concave curvature profile of the handle extending along a majority of the length of the handle (fig. 1C); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (figs. 1A, 1B).

Given the teachings of Kamemizu, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed wherein the handle is substantially waisted in shape. Doing so provides a comfortable fit in the palm of the user's hand.

Welt in view of Teed in view of Kamemizu teach that tongue cleaning instruments such as brush-type instruments and combined toothbrush and tongue scrapes are well known (Welt, column 1, lines 12-18), but fail to disclose wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa.

However, Fox teaches a toothbrush with a handle and head section made of a plastic with a Flexural Modulus of 216,000 psi or 1.49 GPa, such that the material will provide enhanced rigidity to allow the user to better control and manipulate the position of the toothbrush head during use (column 4, lines 15-19, 28-30).

Given the teachings of Welt and Fox, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed in view of Kamemizu wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa. Doing so would provide

enhanced rigidity to allow the user to better control and manipulate the position of the device during use, as taught by Fox.

Regarding claims 21 and 29, Welt discloses a device for removing a composition, the device comprising: a non-shaving head (4) with a concave profile; a handle (6) having a curvature profile and a broadened end distal from the non-shaving head, the curved profile defining a downward concave curvature that extends along a majority of the length of the handle (fig. 7); and a joint comprising an upwardly open V-shaped notch between the head and the handle, permitting an articulation of the head about the handle (column 2, lines 47-53). Welt discloses wherein the joint is formed by a web of plastic material at the base of an upwardly open V-shaped notch between the handle and the head (fig. 7; column 2, lines 40-44).

Welt fails to disclose wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle; wherein the handle is substantially waisted in shape; and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle.

However, Teed teaches a non-shaving head wherein the concave curvature profile of the handle extends continuously along a majority of the length of the handle (figs. 1, 2; [0030]; wherein the handle begins proximal to strap 23); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (fig. 3).

Given the teachings of Teed, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt with the continuous

concave handle of Teed and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle. Doing so provides a comfortable fit in the palm of the user's hand, as disclosed by Teed ([0030]) as well as providing a head with a greater surface area, allowing the user to use less strokes to cover a greater treatment area.

Teed fails to disclose wherein the handle is substantially waisted in shape.

However, Kamemizu teaches a non-shaving head (7) which in use is capable of being moved over the skin to effect removal of the composition; a handle (2) having a broadened end distal from the non-shaving head (figs. 1A-1C) wherein the handle is substantially waisted in shape (figs. 1A-1C); and a joint (elastic portion 5) between the head and the handle, permitting an articulation of the head about the handle; wherein both the non-shaving head and the handle have a downward concave curvature profile when used to effect the removal of the composition (figs. 1C, 2A), the downward concave curvature profile of the handle extending along a majority of the length of the handle (fig. 1C); and wherein the width of the head is at least approximately 50% greater than the maximum width of the handle (figs. 1A, 1B).

Given the teachings of Kamemizu, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed wherein the handle is substantially waisted in shape. Doing so provides a comfortable fit in the palm of the user's hand.

Welt in view of Teed in view of Kamemizu teach that tongue cleaning instruments such as brush-type instruments and combined toothbrush and tongue scrapes are well

known (Welt, column 1, lines 12-18), but fail to disclose wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa.

However, Fox teaches a toothbrush with a handle and head section made of a plastic with a Flexural Modulus of 216,000 psi or 1.49 GPa, such that the material will provide enhanced rigidity to allow the user to better control and manipulate the position of the toothbrush head during use (column 4, lines 15-19, 28-30).

Given the teachings of Welt and Fox, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed in view of Kamemizu wherein the device is formed from a plastics material having a Flexural Modulus of between 0.8 GPa and 1.5 GPa. Doing so would provide enhanced rigidity to allow the user to better control and manipulate the position of the device during use, as taught by Fox.

Regarding claims 2, 15 and 23, Welt essentially discloses the device wherein there is a resistance force acting against articulation of the head, which resistance force increases as the articulation increases (column 3, lines 47-53).

Regarding claims 3 and 24, Welt essentially discloses the invention wherein the head comprises an articulation about the handle through an angle in the range of 10 to 40° (fig. 7).

Regarding claims 4 and 25, Welt essentially discloses the device wherein when the force, causing articulation of the head, is reduced or removed the head is able to recover a previous or original position (fig. 7).

Regarding claims 5, 7 and 26-28, Welt essentially discloses the device being unitary and made of plastic (column 2, lines 40-44) wherein the handle is substantially rigid, the head is substantially rigid, and the joint is the only source of articulation (column 3, lines 47-53).

Regarding claims 30, 32 and 33, Welt essentially discloses wherein the head has a rigid, non-conforming leading edge that effects the removal of the composition (column 3, lines 7-11; wherein Welt also teaches conforming edges (column 3, lines 34-46); therefore, all other edges are non-conforming and made of rigid plastic).

Regarding claim 31, Welt essentially discloses wherein the upward opening closes when a downward force, to effect the removal of the composition, is applied to the handle, and wherein the closure of the upward opening limits the articulation of the head about the handle (fig. 7; column 3, lines 47-53; wherein the opening inherently closes to some extent as the head is moved).

4. **Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Welt et al. (US 5,984,935)** in view of **Teed et al. (US 2005/0197665 A1)** in view of **Kamemizu (US 6,652,550 B1)** in view of **Fox et al. (US 6,502,272 B1)** as applied to the claims above, and further in view of **Fischer et al. (US 2003/0167582 A1)**.

Regarding claim 34, Welt essentially discloses the invention except for wherein the maximum width of the handle is approximately 22 mm.

However, Fischer teaches a non-shaving head scraping device with a handle having a waisted shape (fig. 1E) wherein the maximum width of the handle is

approximately 0.6 in or 15.24 mm ([0065]) or greater if the device is intended to be used by adults ([0062]).

Given the teachings of Fischer, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Welt in view of Teed and Kamemizu wherein the maximum width of the handle is approximately 22 mm. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Further, a greater sized handle would be better suitable for adult user's, as disclosed by Fischer.

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7, 14, 15, 21 and 23-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH SIMPSON whose telephone number is (571)270-3865. The examiner can normally be reached on Monday - Friday 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, *please contact* the examiner's supervisor, Tom Hughes, at (571) 272-4357. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If there are any inquiries that are not being addressed by first contacting the Examiner or the Supervisor, you may send an email inquiry to
TC3700_Workgroup_D_Inquiries@uspto.gov.

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